I: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

that amber is gathered here, near the *Penſchinſka* ſea, upon the river *Tegbil*, and farther north. 135

CHAP. V.

Of TREES *and* PLANTS.

THE moſt uſeful wood is the larch *, and the white poplar †, which ſerves for building their houſes and forts; and they are fit, not only for ſuch boats as the inhabitants uſe, but even for the building of ſhips. The larch-tree, indeed, only grows upon the river *Kamtſchatka*, and ſuch other rivers as fall into it: in other places they make uſe of the white poplar. The pine-tree ‖ and the black poplar ‡ are no where to be found upon the *Kamtſchatka*; and the pitch-tree ** only in one place, and there in ſmall quantities. Although there be many birch-trees ††, yet they make little uſe of them, unleſs in their ſledges, having none near their houſes but what are crooked and uſeleſs; and it is very troubleſome to bring the better ſort from the diſtance at which it grows. 137 313

They make great uſe of the birch bark, which they ſtrip from the trees while yet green; and cutting it in ſmall pieces, like vermicelli, eat it with dried caviar. In the winter, whenever you enter any of their villages, you find the women employed in hacking this green bark with their bone or ſtone axes. They alſo ferment this bark with the juice or ſap of the birch, which makes an agreeable drink. The birches of 314 222 252 273

* Larix. ‖ Pinus. ** Picea.
† Populus alba. ‡ Populus nigra. †† Betula.

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the birches of

Kamtſchatka are much fuller of knots and hard excreſcences than thoſe of *Europe*; but of theſe knots they make very uſeful plates, ſpoons, and cups. Mr. *Steller* obſerved, that the white poplar near the ſea was quite porous and light, which he attributed to the ſalt water; that the aſhes of this wood, laid out in the open air, turned into a ſtony ſubſtance heavy and hard, which, the longer it lies, the harder and heavier it grows. This ſtone, when broken, ſhews ſome ſpecks of iron in its ſubſtance. Sallows * and alders † are the common fire-wood in *Kamtſchatka*. The bark of the ſallow is uſed for food, and that of the alder in dying their leather; as ſhall be related more at large in another place. They have the tree tcheremough‖ and the hawthorn ‡ of two ſpecies, one yielding a red, and the other a black fruit; of theſe they lay up a great quantity againſt winter: they have likewiſe the ſervice-tree ** in great plenty, whoſe fruit is eſteemed amongſt their moſt delicate confections.

Their principal nouriſhment is from the nuts of the ſlantza, which grows every where, both in hills and dales. This ſhrub, or tree, is truly of the cedar kind, only it is much leſs; and inſtead of growing ſtraight, it creeps along the ground. Its cones and nuts are not half ſo large as thoſe of the cedar: the *Kamtſchadales* eat them with the ſhells. Theſe, as well as the tcheremough and the hawthorn berries, are very aſtringent, eſpecially if eaten in any quantity. The greateſt virtue of theſe nuts is, that they are a good remedy againſt the ſcurvy, as all our ſeamen can witneſs: for in the moſt ſevere ſcurvy this is, as one may ſay, almoſt their only medicine; and from the tops of the ſlantza and cedar was their common drink made, ſometimes fermented, at other times drunk warm like tea; and orders were given by

* Salices.
† Alni.
‖ Padus foliis annuis. LINN.
‡ Oxyanthus fructu rubro et nigro.
** Sorbus.

the

the commanding officer that the kettle with ſlantza and cedar tops ſhould never be taken from the fire. Red currants, raſberries, and kneſhnitza are very rare there, or grow at ſuch a diſtance from their houſes that no one cares to go in ſearch of them. The blackberries of the gimoloſt * are of great uſe, being of an agreeable taſte, ſomething like new-fermented beer. The bark of this ſhrub is uſeful in diſtilling brandy, giving ſtrength and ſharpneſs to the ſpirit.

The juniper † grows every where; but they do not uſe the berries, as they lay up great ſtore of moroſky ‖, pianitza ‡, bruſhnitza **, klioukva ††, and vodinitza ‖‖: and when they have great plenty of theſe berries they not only uſe them as confects, but diſtil brandy from them, except from klioukva and vodinitza, which yield no ſpirit. Mr. *Steller* writes, that the vodinitza is no bad remedy for the ſcurvy; and the inhabitants dye any old cloaths with it that have loſt a in colour, to which it gives a cherry-colour. Some boil it up with train-oil and alum, and dye the beaver and coarſe ſables with it well enough to deceive the unwary or ignorant. In many places they content themſelves with roots and herbs, and make them ſupply not only their want of bread, but of fiſh alſo. The principal of theſe is the ſaranne, which ſerves inſtead of groats. It belongs to the claſs of the lillies ‡‡; but as this ſort is never ſeen any where but in *Ochotſkoy* and *Kamtſchatka*, I ſhall give a deſcription of it. It grows about half a foot high; has a ſtalk near the thickneſs of a ſwan's quill, red below and green above. Its leaves grow in two

* Lonicera pedunculis biflorio, floribus infundibuli formis, bacca ſolitaria, oblonga, anguloſa. GMEL. flor. Sib.

† Juniperus.

‖ Chamemorus RAII Syn.

‡ Vaccinium Spec. 2. LINN. Bilberry.

** Vaccinium Bilberry Spec. 3. LINN.

†† Vaccinium Red Crowberry Spec. 4.

‖‖ Empetrum.

‡‡ Lilium flore atro rubente.

root of this plant, and the wounds which they give are incurable unleſs the poiſon be ſucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and ſwells, and in two days the patient dies. The very largeſt whales when they have received a ſlight wound from ſuch a poiſoned weapon, cannot bear the ſea for any conſiderable time; but throwing themſelves upon the ſhore, expire moſt miſerably, with terrible groans and bellowing.

The following are very ſerviceable for cloathing, and other houſehold purpoſes.

There grows upon the ſea-ſhore a whitiſh high plant, reſembling wheat. I have ſeen it at *Strelinimuiſe*, the palace below *St. Peterſbourg*, upon ſandy ground. Of this they make mats, which ſerve them as coverings and curtains; the beſt of theſe are made of different colours, with the beards of the whales ſplit very ſmall and dyed. They alſo make clokes of it, like the old *Ruſſian* milled clokes, ſmooth within, and rough without, which makes the rain run more eaſily off them. The prettieſt of this kind of work is their little bags and baſkets, in which the women keep their trinkets. Theſe are ſo neat, that one would take them to be made of ſplit canes; and they are ornamented with the hair of whales' beards and horſe-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fiſh or different herbs and roots, which they provide againſt the winter: beſides it ſerves alſo to thatch their houſes or huts. They mow it with a ſcythe, made out of the ſhoulder-blade of a whale; which they whet ſo well by grinding it upon a ſtone, that they bring it to a very good edge.

In the marſhes there is found a plant reſembling the cyperoides. This they dreſs with a double-toothed comb of bone, and uſe it to wrap their children in inſtead of ſhirts or ſwaddling cloaths, to keep them clean and ſweet. They alſo roll

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

roll it about their legs, and it ſerves for ſtockings. The women wrap it round their bodies, from an opinion that the warmth promotes fruitfulneſs. It ſerves to light their fires, being eaſily kindled. On great holidays they bind garlands of it about the heads and necks of their idols; and when they make any ſacrifice, or kill any wild beaſt, they offer ſome of this plant as an atonement, that the relations of the beaſt which is killed may be appeaſed. Formerly they did the ſame by the heads of their enemies: after having adorned them with theſe garlands, they performed ſeveral ſorceries, and then ſtuck them upon poles. The Coſſacks call this plant *tontchitze*.

Few plants are of more general uſe than the nettles; for being without any kind of hemp, they would have no materials to make nets of for fiſhing, which is abſolutely neceſſary for the ſupport of life. They pull them up in the months of *Auguſt* or *September*, and binding them in bunches lay them to dry in the ſhade. When they dreſs them, they firſt ſplit them with their teeth, then peel off the ſkin, and beat them. After this they comb them, then ſpin them between their hands, and wind them up upon ſpindles. The thread of the firſt ſpinning, they uſe for ſewing, but to make their nets they double and twiſt it; which, after all, never laſt above one ſummer. The truth is they are very ignorant and unſkilful in this manufacture; and moreover they neither ſteep their nettles, nor boil their yarn.

1. [plant resembling cyperoides, which is dressed]

CHAP.

7:Lesseps T-3 (1787-88)1790 Kamchadal

224 them; one would ſuppoſe they were of no value.

226 The Kamtſchadales have different ſeaſons alſo for fiſhing. Their ſalmon and trout ſeaſon is in June, their herring ſeaſon in May, and that of the ſea wolf in ſpring and ſummer, but principally in autumn.

They ſeldom uſe ſeines, but almoſt always common nets *, or a kind of harpoon, which they manage with great dexterity. Seines ſerve only for ſea wolves; they are made of leather ſtraps, and the meſhes are very large. They have another mode of fiſhing,

283 314 439 * Their nets are made of pack thread, like ours; they purchaſe it of the Ruſſians: there is another kind however, which they fabricate themſelves from nettles, of which they take care to lay up a conſiderable ſtore. They gather them in autumn, tie them in bundles, and place them under their balagans to dry. When their fiſhing and harveſts are compleated, they prepare their nettles. They ſlit them, and then ſtrip off the rind expertly with their teeth; the reſt they beat and ſhake till the filaments are ſeparated, and it is fit for ſpinning.

by